pustular infection. This condition responded quickly to change of living conditions and climate.

CONTACT DERMATITIS

This problem is ever with us, and it is always interesting to attempt to ferret out the exciting agent. There have been two factors which we have seen in the Navy which are not common in civilian life. There have been several patients who are sensitive to the Navy blue woolen uniforms. The eruption appears on the extremities for the most part. This has been severe enough in some cases to recommend discharge. The other factor is that the dyes from the regular issue shoes cause a contact dermatitis which must be differentiated from fungus or pyogenic infections of the feet.

VENEREAL DISEASES

The low incidence of these diseases at the hospital has been most striking. No cases of the rarer venereal diseases granuloma inguinale and chancroid have been seen. There has been one case of lymphopathia venerum. The incidence of gonorrhea is low. This can be explained by the fact that the uncomplicated cases are treated at smaller medical units, mainly dispensaries and ships, and only those that have complications come to the hospital.

Syphilis also has a low incidence. A routine Kahn test is done on all patients that enter the hospital. Over seven thousand tests have been done in the last eight months, and only 1.83 per cent have been positive. Of this latter figure 0.6 per cent were false positives, leaving 1.23 per cent which actually syphilis.

Very few cases of early syphilis have been seen. This again could be accounted for by the fact that these patients are seen at other medical stations. Another factor is that the personnel who have been in action in the South Pacific have not had the opportunity for contracting the disease.

It is interesting to note in this connection the recent editorial in the *Journal of the American Medical Association*,[2] which states that there was extremely low incidence of syphilis in the Army in the last half of the past year as against a rapid rise in the incidence soon after the draft law went into effect.

We have been employing in early syphilis a semi-intensive form of therapy. It consists of three injections of mapharsen 0.06 gms. weekly, and one injection of 0.13 gms. of Bismuth sub salicylate.

FALSE POSITIVE SEROLOGICAL REACTIONS

A number of these reactions have been encountered. Some of the slightly positive come from acute upper respiratory infections. Infectious mononucleousis is another bad offender. There have been two cases of strongly positive reactions from this disease. Other causes of false positive reactions are those appearing after routine immunization injections. We have also seen a few connected with filariasis.

Malaria has produced the largest number of false positives. In six to eight patients the reaction was strongly positive. On following these patients, the reaction slowly diminishes and finally becomes negative. This sometimes takes two to three months. It is important to note this, since a great mistake could easily be made if antiluetic therapy were started with only the finding of a positive serology.

COMMENT

In addition to the above, we have had the usual incidence of the common and rarer cutaneous diseases that would be seen in a civilian service of this size. It appears then that, so far, dermatological problems in the Navy are very similar to our previous experience in private and clinic practice. In the very near future, however, truly unusual problems from the tropics may arise.

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MENTAL ILLNESS FOLLOWING PREGNANCY*

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WHILE mental illness following pregnancy is an unusual incident in the practice of the average obstetrician or general practitioner, it is a constant problem to the psychiatrist. Before the development of shock therapy the outlook was usually unfavorable, and the patients which recovered were necessarily hospitalized for many months. In the author's experience the proper use of shock therapy, in these cases, has been a valuable procedure, not only in reducing the period of hospitalization, but in markedly increasing the percentage of recovery.

FREQUENCY OF PSYCHOSES IN PREGNANCY

It has been shown in various statistical studies that a psychosis results in one out of every 400 to 1000[1] pregnancies, and also that about 5 to 10 per cent of the psychoses in women follow pregnancy. While it is generally felt that there should be no separate classification of puerperal psychosis, and that the illness should be considered as a manifestation of schizophrenic, manic-depressive psychosis or a toxic-exhaustive psychosis, the author cannot accept this viewpoint without certain reservations. Often the psychoses in this group are not easy to define in terms of other psychoses, as they tend to be a separate entity. This feature has been noted by others. Strecker

* Chairman's Address.—Read before the Section on Neuropsychiatry, at the Seventy-second Annual Session of the California Medical Association, Los Angeles, May 2-3, 1943.

and Ebaugh[2] found a severely disturbed sensorium in 77 per cent, and hallucinosis in 30 per cent of their cases diagnosed as manic-depressive. They also noted a great frequency of manic-depressive features in their cases diagnosed as dementia praecox. The variability of puerperal psychoses was shown by Karnosh and Hope,[3] who compared the incidence of childbirth psychoses to the number of births and to all types of psychoses which developed over a ten-year period in the same registration area, and could demonstrate no fixed constancy of puerperal psychoses as compared to the birth rate or to the total psychotic population. Consequently, it would seem that there are other factors involved besides the constitutional predisposition of the patient to develop a certain type of psychosis under severe psysiological changes. What these factors are the author is not required to state. Toxic, endocrine and emotional factors have all been implicated by various authors.

AUTHOR'S SERIES

The author has had under his observation 11 patients who developed a psychosis after pregnancy since the advent of shock therapy. Of these, nine would by the standard classification have a schizophrenic type of response, while two were manic-depressive in nature. No cases of the so-called toxic-exhaustive group were observed. Incongruity of behavior, stereotypy, silliness, impulsiveness, catatonia, incoherence and blocking of speech, delusions, ideas of reference, and hallucinations were in evidence. In the depressed cases, poverty of thought, feelings of inadequacy, ideas of self-accusation and self-deprecation, strong suicidal tendencies were considered to be significant. No case was included in which the mental symptoms did not develop within three weeks after delivery. Patients with a "dementia praecox reaction" were given insulin shock by preference, those with depressions received convulsive shock therapy. Convulsive therapy was also used in the cases of dementia praecox type which did not show an adequate response to a full course of insulin shock therapy.

REPORT OF CASES

CASE 1.—Mrs. S. J., aged 25 years, was first seen July 30, 1939. A week after her second baby was born she had become acutely disturbed. She had been excited and negativistic at first, rapidly becoming delusional and hallucinatory. She received a full course of insulin shock therapy without experiencing complete remission, but after a short period of routine care she was discharged on November 22, 1939. She was somewhat unstable emotionally and psychoneurotic for a time, but gradually improved and at present seems quite well. She had apparently been depressed for several months following the birth of the first child two years before.

CASE 2.—Mrs. M. G., a primipara aged 26, had no difficulty until the day of her delivery, July 7, 1938, when she became confused and fearful. This disturbance subsided; but ten days later she became seclusive, had blocking of speech, and was not sure the baby was hers. She received a full course of insulin shock therapy, following which she was discharged. However, she relapsed, returned to the sanitarium and was given four metrazol convulsions. She had a complete remission, was discharged December 23, 1938, and has remained well since.

CASE 3.—Mrs. A. H., aged 29, was first seen on August 29, 1939, when her second child was 13 months old. About 2 weeks after this child's birth, she had developed the fear that she would be unable to care for it. She progressively became more depressed, developed insomnia, anorexia, and was quite restless. She became convinced that nothing could be done for her, and was institutionalized only after three attempts at suicide. In the sanitarium she gradually became more disturbed and developed somatic delusions. Finally, consent from the Christian Scientist husband was obtained, and the patient was given twelve metrazol convulsions and made a complete recovery. She was discharged December 29, and has remained well.

CASE 4.—Mrs. F. L., aged 26, was first seen December 21, 1939, after the birth of her third child. During her pregnancy she had considerable nausea and vomiting, and had lost a great deal of sleep. Shortly after her discharge from the hospital she complained of anxiety and fear. Insomnia and anorexia became troublesome. There were many paranoid delusions and ideas of reference. The patient was severely depressed and restless. Hallucinations were first noted in the sanitarium. She was given a full course of insulin shock therapy without recovery, and was taken home against advice. She again became disturbed and was admitted to the sanitarium on May 17, where she remained until August 3, 1940. During this period she was given six metrazol convulsions. When discharged she was still paranoid, confused and lacked insight. After a few months at home she was committed to the State Hospital.

CASE 5.—Mrs. M. A., aged 22, was first seen January 26, 1940, three months after the puerperium because she had taken her two children to different homes in preparation for suicide. The patient had always been introspective and depressed in nature. About one month after her child was born she became severely depressed and apprehensive. She gradually became more depressed, was confused and apathetic. A full course of insulin shock therapy was given with good results, and she was discharged on May 6.

CASE 6.—Mrs. M. T., aged 23, became confused and disturbed a few days after the puerperium. Delusions and hallucinations rapidly developed. Treatment was delayed for several weeks until surgical repair of a third degree laceration could be completed. A full course of insulin shock therapy was given, and the patient made a complete recovery, leaving the sanitarium nine weeks after admission.

CASE 7.—Mrs. O. W., aged 26, was first seen August 26, 1941. Several weeks after the birth of her child in May, she became nervous, was troubled with nausea and extreme restlessness. She expressed many delusions and had several periods during which she had visual hallucinations. In the sanitarium she became violently disturbed, antagonistic and quite confused, delusional and hallucinatory. She was given a full course of insulin shock therapy and seemed to be quite well on discharge. She relapsed shortly, returned and was given four metrazol convulsions and discharged. She had several minor epi-

sodes which necessitated her returning to the sanitarium a few days each time. Because these preceded the menstrual period, progesterone was administered in the premenstrual period and seemed to be beneficial. She recently reported to the office, seemed quite well, and stated that she got along much better when she had received progesterone before each period. She has been considered a social recovery.

CASE 8.—Mrs. W. C., aged 23, was admitted to the sanitarium November 12, 1941. About three weeks after her child was born she became ill, and when seen a few days later, was catatonic and mute. In the sanitarium she was at times very listless, often badly disturbed. For several weeks she required forced feeding. She tried to vomit everything given her. She received insulin shock therapy and made a complete recovery, being discharged March 20, 1942.

CASE 9.—Mrs. C. C., aged 32, was first seen February 11, 1942. She had gradually become more nervous, beginning a few days after the puerperium. She became delusional before she left the hospital, and when seen a few days later she was extremely agitated and antagonistic. She identified herself with the Deity, thought her food was poisoned and had auditory hallucinations. She was confused and disoriented, often depressed. She was given a full course of insulin shock therapy which, because of incomplete recovery, was followed by three electroshock convulsions. She showed considerable improvement, and was taken home on April 26; but, becoming disturbed, she was committed to the state hospital.

CASE 10.—C. Z., aged 26, was first seen September 14, 1942. Following the normal birth of her child six weeks before, she had become progressively more nervous and depressed. Three weeks later she slashed her wrists and was hospitalized three weeks before coming under my care. She was markedly depressed and wept frequently. Restlessness was marked, and the patient stated that she felt confused, though she showed no evidence of this. She was self-deprecatory and self-accusatory. Insomnia was marked. She was given five electroshock convulsions, improved and was discharged. She relapsed and returned October 7, and was given six more convulsive treatments with marked improvement. She was finally discharged on December 6, 1942, though still somewhat unstable emotionally. She gradually improved and was discharged as well January 15.

CASE 11.—Mrs. A. M. became confused and fearful ten days after her child was born. She had insomnia, was mildly delusional and tried peculiar ways of feeding the infant. Because the family refused to send her to a sanitarium, the patient was treated at home under the care of a nurse. She received fifteen units of insulin, three times daily before meals, castor oil daily and adequate sedation. She improved after a few weeks, relapsed and then went on to complete recovery.

COMMENT

Nine of the eleven cases reported in this article resemble dementia praecox, two are depressive states. All but two of the cases reported made a good recovery. These were both cases of dementia praecox type. Another patient, with a schizophrenic reaction, requires progesterone during the week before the menstrual period in order to avoid severe nervousness and irritability, and should probably be classified as having made a social recovery. The average period of hospitalization for the patients who recovered was slightly less than four months.

Before the advent of shock therapy the course of illness was long, regardless of the type of disturbance, and while the recovery rate was relatively high in the manic-depressive and toxic-exhaustive groups, it was very low in the schizophrenic group. Strecker and Ebaugh,[2] in a study of 50 cases, found an average period of illness of eight months with a recovery rate of 72 per cent in the manic-depressive cases, and an average illness of more than eleven months in the toxic-exhaustive group, with a recovery rate of 76 per cent. In the dementia praecox group the average duration of illness was more than eight years, and no patients recovered though 2 out of 13 were noted as improved. Karnosh and Hope, in their report, stated that in the schizophrenic group 71 per cent failed to recover.

REFERENCE TO THE LITERATURE

In reviewing the literature one finds very little pertaining to the modern treatment of the psychoses following pregnancy. In regard to the schizophrenic states in general it is universally accepted that insulin shock offers the best results if used early in the illness. In the manic-depressive psychoses, especially the depressive phase, convulsive shock is considered preferable. Kraines[4] reports nine cases of psychiatric states following pregnancy, which were treated with convulsive shock therapy only. He does not group these cases but reports them as a whole. All but two recovered and the illness in no case exceeded four months. Kraines feels that the important factor in treatment is the early application of shock therapy. He also noted benefit in one case where the menstrual period was preceded by emotional instability with the use of testosterone proprionate for a few months. Schmidt[5] reports recovery in one case, which he attributes to the use of progesterone in large doses preceding the menstrual period. This author cites Kraines' experience with testosterone proprionate, and states that "the action of this hormone would be the same as that of progesterone as regards their relationship to the estrogenic hormone." Schmidt also feels that the postpartum psychosis is a clinical entity, and states that the prognosis is quite favorable for recovery in all cases. This is certainly not consistent with the opinions expressed in the literature, and does not coincide with my conception of the problem.

ON PROCEDURES IN TREATMENT

In the management of a case in which mental illness develops following pregnancy, the author considers it advisable for the patient to be institutionalized as early as possible. Generally a period of observation for about two weeks is recommended, and during this time the patient is given 5 to 20 units of insulin before each meal, and

castor oil daily. Treatment is otherwise symptomatic. Psychotherapy is utilized if considered advisable. If the patient improves sufficiently, shock therapy is not recommended until improvement ceases, as a small number of patients will recover under this régime.

If the course of the illness is not satisfactory, shock therapy is then instituted. Insulin shock is strongly advised in the cases with a dementia praecox type of reaction. This is in accord with its use in dementia praecox generally. Electroshock has entirely replaced metrazol in convulsive shock therapy, because of ease of administration and relative freedom from complications, and is the treatment of choice in the manic-depressive type of reaction especially the depressed phase. While the use of convulsive therapy does not change the recovery rate to any marked degree in the postpartum depressions, it does substantially reduce the period of hospitalization, and probably increases the rate of recovery. Convulsive therapy is also used, in the few patients who do not show a complete recovery with insulin shock, often with excellent results. Electroshock therapy is considered preferable to symptomatic treatment in those cases of schizophrenic reactions where insulin shock cannot be utilized for various reasons. Progesterone should be tried in all cases in which the menstrual period is preceded by emotional instability and tension states. The advent of shock therapy has completely changed the prognosis in puerperal psychoses.

CONCLUSIONS

1. The mental illnesses which follow pregnancy constitute an indication for shock therapy. They primarily depend upon the constitutional makeup of the individual, though the precipitating factors as yet are unknown.

2. Unless properly treated early in their development, the prognosis in the so-called puerperal psychosis is poor.

3. Insulin shock is preferable in the dementia praecox type of reaction, but should be followed by electroshock if recovery is incomplete.

4. Electroshock is the treatment of choice in cases showing chiefly depression.

5. Progesterone may be of benefit in those cases with premenstrual tension.

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DERMATOLOGIC MANAGEMENT: SOME FUNCTIONAL CONCEPTS*

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WHEN one becomes chairman of a section, he is expected to give an address on whatever theme he wishes. He is given a free hand and discussion is barred. He may, therefore, say what he pleases and remain unquestioned. I have acquiesced in this prerogative and hope that the conception of this paper will be accepted as sound and thought-provoking.

By a functional concept in dermatological management, I mean that I am turning my thoughts to the functional disturbances that underly many of the phenomena of skin changes. This is not so much directed toward the experienced dermatologist, but to the tyro who has learned a formula by which to treat a diagnosis. This person must broaden his conception of management to include such factors as the individual as a whole, his color, age, and skin type, his physiology in general; the physiology of the part involved, and finally the physiology of the disease process itself. It would be far better if we could scrap all "name diagnoses," and adopt pathological ones. If the intricacies of the phenomena could be so condensed, our students then would not think in terms of a name, but in terms of physiological and anatomical changes.

Unfortunately, the discoveries of specific microbic agencies and specific deficiencies have had a limiting effect on the practice of medicine and its teachers. These have, in their acceptance, caused a neglect of associated causal factors without which no disease could exist. Medicine has been led into a search for new diagnostic procedures, and those, such as chemistry, bacteriology, radiology and endoscopy, have been so applied. The search for accuracy has over-reached symptomatology; objectivity has become paramount. We are now turning away from the focus of infection or focus of irritation to one of consideration of age, sex, heredity, physical type, and temperament, as well as emotional and occupational stress. With these, we must combine eating habits, relative to food and its mineral and vitamin factors; and consider the individual's ability to absorb and utilize these factors in a normal and effective manner.

It is necessary, therefore, that we get away from nomenclature and classification as the main objective of diagnosis. All symptoms are specific phenomena for a physiological process or disturbance referable to a variety of changes or stresses.

DIAGNOSTIC AIMS

The first aim of diagnosis should be to discover the physiology of a symptom or functional error,

* Chairman's Address.—Read before the Section on Dermatology and Syphilology, at the Seventy-second Annual Session of the California Medical Association, Los Angeles, May 2-3, 1943.